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COLUMBUS, OHIO

Mycological Bulletin

No. 83

W. A. Kellerman, Ph. D., Ohio State University.

Columbus, Ohio, November, 1907.

A MODERATE VARIETY THIS TIME.

We present several specimens of beauty or interest—the striking *Calvatia,* and the beautiful *Sarcoscypha,* one of the most charming of the attractive Pezizas, furnished us by the skillful photographer, Mr. G. D. Smith of Akron. We will have opportunity later to see other specimens of his handiwork. Teachers who see these may be interested to know that Mr. Smith will furnish copies of his photos at a very moderate price.

DESCRIPTION AND PICTURE OF CALVATIA ELATA AND SARCOSCYPHA FLOCCOSA.

G. D. SMITH.

CALVATIA ELATA.

The peridium is globose above and plicate below where it is abruptly contracted into a long stem-like base. The base is slender, cylindrical, and sometimes pitted. When in its prime condition the entire plant is a rich cream color. The cortex consists of a coat of persistent granules or spinules. The inner peridium is white or cream colored becoming brown or olivaceous. The mass of spores and capillitium is usually brown. The threads are very long and branched. Spores are usually globose and even but may be sometimes slightly warted. I found this beautiful specimen last September growing in a sphagnum swamp near Akron, Ohio. The cut shows it natural size.

SARCOSCYPHA FLOCCOSA.

This species belongs to the Discomycetes and has a long slender stem which broadens out into a slender goblet-shaped cup at the upper end. The entire plant outside the cup is covered with short hairs while the rim of the cup is beset with long, strigose hairs. The inside of the cup is a deep red color while the outside of the entire plant is a very delicate pink.

The plants photographed are shown natural size and were found growing in a rich shady woods near Aron, Ohio, on July 1, 1907.

Fig. 272. CAL-VA'-TI-A E-LA'-TA. See page 367.

NOTES FROM MUSHROOM LITERATURE. IX.

W. A. KELLERMAN.

The report of the State Botanist, 1906, Charles H. Peck, was published July, 1907, being Bulletin 116, Botany 10, New York State Museum. It can be purchased of the New York State Education Department, Albany, for 35 cents per copy. It is dispensable to every student of our Mushrooms. These new species by Dr. Peck are included: Amanitopsis pulverulenta, Boletus subpunctipes, Collybia campanella, Cortinarius validipes, Entoloma minus, Flammula expansa, Hygrophorus burnhami, Marasmius phyllophilus, Mycena albogrisea, Omphalia pusillissima, Peckiella hymenii, Pleurotus terrestris, Russula foetentula, Russula modesta, Russula pectinatoides, Tricholoma hirtellum, Phallogaster whitei, Hymenogaster anomalus, Leptonia transformata, Hygrophorus ruber, Hygrophorus serotinus.

Remarks and observations of a few species are here transcribed.

"BOLETUS NIGRELLUS PK.—A form of this extremely rare species was found in Sand Lake, in which the pileus is yellowish or greenish yellow when fresh, and its flesh as well as the tubes and stems slowly changes to a dingy flesh color and then to black or black where wounded, as in the type.

"CANTHARELLUS CANTHARELLUS (SCHW.) FR.—A form of this Mushroom occurred plentifully the past season near Menands. The hymenium was distinctly marked by branches and anastomosing.

"PAXILLUS PANUOIDES FR.—A singular form of this species was found by Dr. H. von Schrenk growing on pulp paper that had been stored for a considerable time in an enclosure where there was not much light. Both habitat and place were unusual and evidently had a modifying influence on the character of the specimens. Some of them were four inches long, including the narrowed stem-like base, and two or three inches broad. They were nearly white when fresh, but in drying they gradually assumed a yellowish tint approaching the normal color of the species."

About half dozen pages are devoted to the Edible Fungi, the following being fully described and illustrated by colored plates: Tricholoma hirtellum (new species), Tricholoma nudum, Clitocybe amethystina, Clitocybe ochropurpurea, Russula compacta, Russula earlei, Russula pectinatoides (new species), Russula uncialis, Agaricus micromegathus, Boletus frostii, and Boletus rugosiceps.

The New York species of Hygrophorus are described and keys furnished to the species of the three groups into which the genus is divided. Prof. Peck says: "The waxy character of the hymenium is the chief distinguishing character of the genus; the lamellae are usually thick, distant, or sub-distant, and their hymenial surfaces somewhat separable from the trama. Many species with decurrent gills are similar in appearance to species of Clitocybe, but such species may generally be distinguished by their distant lamellae and their viscid pileus and stem." Forty-two species are included in the monograph.

The New York species of Russula, 59 species, are similarly treated. Dr. Peck, after giving the technical description, says: "This genus is closely related to the genus Lactarius, from which it is easily distinguished by the absence of the milky juice. * * * The pileus is destitute of concentric zones, but in the genus Lactarius such markings are frequent. The red colors which are so conspicuous and common in this genus are rarely, if ever, seen in Lactarius. In both genera many species have a mild or an agreeable flavor, and many others have an acrid, hot or peppery taste. This disagreeable flavor is generally destroyed in cooking so that nearly all the species that have been tried have been found to be edible."

A NEW NAUCORIA.—The illustration shown as Fig. 373, represents a new species recently described by Professor Atkinson in the JOURNAL OF MYCOLOGY. His statements in full are as follows:

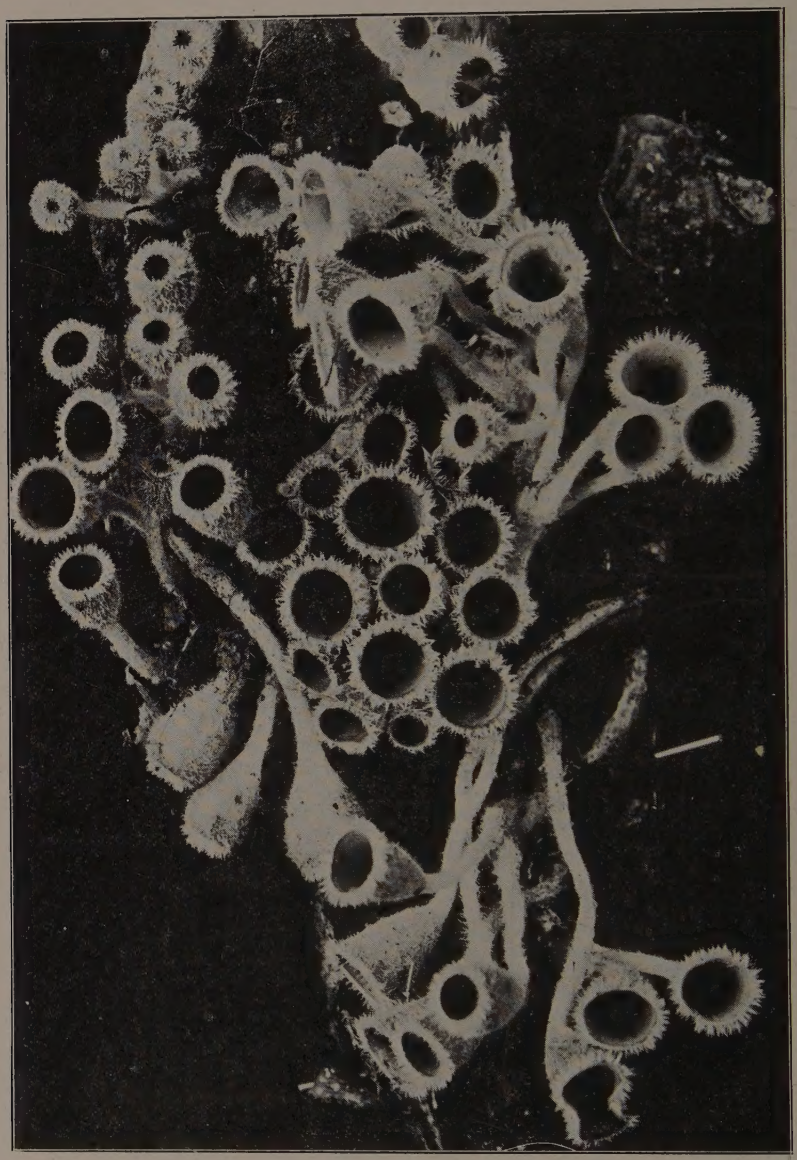

FIG. 273. SAR-CO-SCY'-PHA FLOC-CO'-SA. Picture of a common and beautiful Peziza which is described on page 367. Photo by G. D. Smith, Akron, Ohio.

Material received from Prof. W. A. Kellerman and Supt. M. E. Hard, Central Ohio, prove to be undescribed species of fungi. The diagnoses of one of these forms is given below; it is also illustrated by a half-tone from photograph made by the collector.

NAUCORIA PALUDOSELLA ATKINSON N. SP.—Growing on living sphagnum, other mosses and on rotten wood, Sphagnum moor, Buckeye Lake (Cranberry Island), Ohio, W. A. Kellerman 4464, Sept. 1905, and M. E. Hard and W. A. Kellerman, Oct. 1906. (4916, W. A. K.)

Plants 6-8 cm. high; pileus 2½-3 cm. broad; stems 3-4 mm. thick.

Pileus viscid when moist, convex to expanded, in age somewhat depressed, clay color, darker over center, often with appressed clay brown scales with a darker color.

Gills raw umber to Mars brown (R), emarginate, adnate, sometimes with a decurrent tooth, easily becoming free.

Cystidia on sides of gills none, edge of gills with large hyaline thin-walled cells, subventricose, sometimes nearly cylindrical, abruptly narrowed at each end with a slight sinus around the middle.

Spores subovate to subelliptical, smooth, 7-9x4-5 *u*, fuscous ferruginous, dull ochraceous under microscope.

Stem same color as pileus but paler, cartilaginous, floccose from loose threads or in some cases abundant threads over the surface, becoming hollow, base bulbous, the extreme base covered with whitish mycelium.

Veil rather thick, floccose, disappearing leaving remnants on stem and margin of pileus when fresh.

DESCRITION AND ILLUSTRATION OF PECK'S PSATHYRELLA HIRTA.

W. A. KELLERMAN.

An interesting little Agaric appeared recently in the soil of a bed in the Ohio State University Conservatory. It confined itself to a very small area, the plants usually standing a short distance apart. When young it was very conspicuous by reason of the rather large tufts of white hairs that completely covered the small pileus. It takes on a deep dull orange color (fourth shade of orange, Prang's system) when the cap expands, and then the hairs mostly have disappeared. When quite mature none or only traces of the hairs remain—so easily do they vanish especially by application of water, (outside the greenhouse the rain of course would have the same effect.)

Specimens of the plant (as No. 4915) were sent to Professor Peck who identified it as a species which he described in the 50th Annual Report of the New York State Museum (1898), p. 107. I quote his description in full:

"Psathyrella hirta *n. sp.*—Pileus thin, hemispherical or convexs, adorned when young with erect or spreading tufts of white, easily deterible and quickly evanescent hairs, hygrophanous, brown or reddish-brown and slightly striatulate when moist, pale grayish-brown or dingy whitish when dry, flesh subconcolorous; lamellae broad; moderately close, adnate and often furnished with a decurrent tooth, at first pallid, becoming blackish-brown or black; stem flexuose, squamose, hollow, shining, white; spores elliptical, black, .0005 to .00055 in. long, .00025 to .0003 broad.

"Subcaespitose; pileus 4 to 6 lines broad; stem 1 to 2 in. long to 1 to 1.5 lines thick.

"Dung or dungy ground in shaded places. Adirondack mountains. July.

"The species has some points of similarity to *Psathyra gossypina* and *P. pennata,* but its adnate lamellae and black spores distinguish it from

FIG. 274. NAU-CO'-RI-A PAL-U-DO-SEL'-LA. A new species found on Cranberry Island (sphagnum swamp), Buckeye Lake, Central Ohio. See description on other page.

both. The hairs of the pileus are coarse and vanish so easily that they are preserved with difficulty in the dried specimens." (Charles H. Peck.)

The illustration, Fig. 276 (on last page), shows plants in various stages of development. The dense floccose tufts are seen plainly on the young specimens, and even on those quite well developed. Specimens in age showing these tufts of hairs most conspicuously were selected for the photograph. From the specimens on the left scarcely any are to be seen. The plants are but 3 cm. high, the caps about one and a half cm. wide, and the stems one to two mm. in diameter.

Specimens later were sent to Professor Atkinson, who considers them *Deconica atrorufa,* (named by Schaeffer originally as *Agaricus atrorufus*); some others use the name *Psilocybe atrorufa* for this. A final decision may yet have to be deferred in reference to this plant. Unfortunately the greenhouse bench gave way and the soil in which specimens were growing had to be removed. It is hoped that plants may be found later and their taxonomic status satisfactorily settled.

FIG. 275. NAU-CO'-RI-A PAL-U-DO-SEL-LA. Same species as Fig. 274. This shows better the *yellow* strands of mycelium at the base of the stem, by means of which the attachment to the sphagnum is intimately secured. See description of the species on other page.

Fig. 276. PSATH-Y-REL'-LA HIR'-TA. A neat little mushroom found growing in the greenhouse, thought worthy of more extended notice, therefore see page 371.

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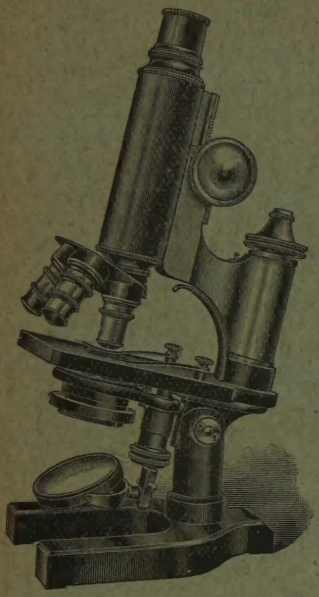

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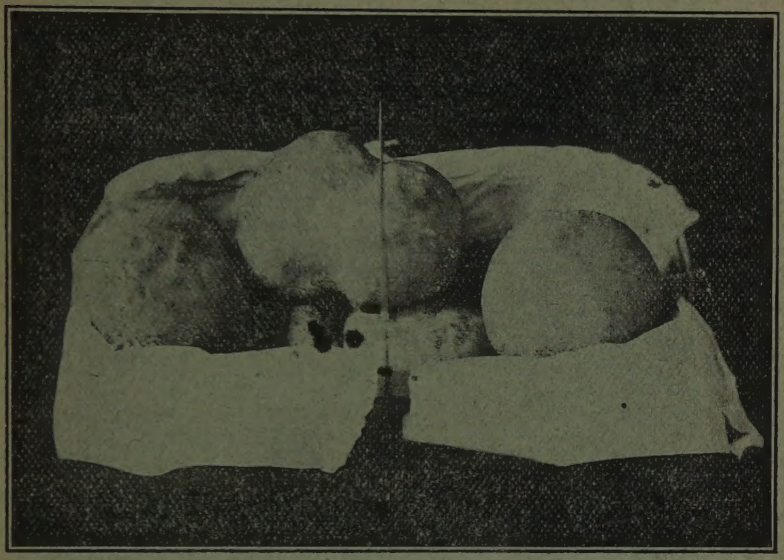

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